CLAIMS: I claim:

1. A fluid kinetic pump comprising a rotor element having a shaft and an axially inner cylindrical cavity and an axially outer cylindrical surface, and having at least one fluid passage between said axially inner cavity surface and said axially outer surface, and such that said fluid passage intersects said cylindrical inner rotor cavity tangentially in the direction of rotation, and the width of said fluid passage at said intersection is greatest within said fluid passage; and said rotor element is fixed for rotation within an approximately cylindrical cavity of a housing member and rotating in close proximity to said cavity walls of said housing member, and said housing member having at least one axially inner intake means to cause fluid to flow tangentially into said inner rotor cavity in the direction of rotation of said rotor, and said cylindrical cavity of said housing member also having at least one tangential discharge port through said approximately cylindrical chamber wall of said housing; and such that during rotation, fluid enters said fluid passages in said rotor tangentially and is contained by said passage walls and by cylindrical fluid isobar on the axially inner surface of said fluid passage, and by another cylindrical fluid isobar at said tangential discharge port location, said isobars being caused by centrifugal force; and said fluid passage having said containment of fluid except during the sector when it passes said tangential discharge port, and such that during rotation, fluid enters the pump tangentially in the direction of rotation, changes rotational energy within said fluid passage in said rotor, and is discharged by momentum tangentially through said tangential discharge port through said approximately cylindrical chamber wall of said housing.

2. A motor as in claim one in which the fluid enters the intake plenum under pressure and is forced from the intake plenum into the passages between adjacent vanes, the vanes being shaped such that they do not intersect the intake plenum tangentially, but at a small angle and such the fluid is forced into the passages where it is discharged tangentially from the axially outer fluid passage since the vanes are tangent to an axially outer circle of revolution and causing the fluid to exit the pump tangentially so that at start up there is a force of jet action out of the

tangential passages which provides torque to the rotor, and as the rotor reaches speed the fluid proceeds from the intake plenum tangentially and with inertia and acts against the rotor passages, which slow the fluid velocity, due to acting against the initial direction of flow as like a propeller, such that the fluid loses energy and the rotor gains energy, and such that at discharge, the fluid has a high velocity with respect to the fluid passage walls, but a low velocity with respect to the earth.

3. A pump as in claim 1 in which the axially inner tip of the vanes intersect the outer surface of the intake plenum tangentially and the vanes intersect the outer cylinder of revolution at the chamber wall of the second housing member at a greater angle, such that at the axially inner vane tip the rotation vane tip is traveling in the same tangential direction as the tangential fluid within the intake plenum, and the vanes are angled from the inner tip away from the direction of rotation, so that as the fluid enters the passage between vanes it is traveling initially by momentum, and continues into the passage, filling the passage, which then become contained, causing the pump to become a positive displacement, the containment being by the adjacent vanes, an axially outer isobar, which is coincident with the axially inner cylindrical wall of the second housing member which is in close proximity to the axially outer vane tip which contains the fluid on all sides except the inner surface, which is the boundary of the intake plenum as well as being a cylinder of revolution of the axially inner vane tips, which provides the final containment boundary, being an isobar which doesn't allow the fluid to move axially inward due to centrifugal force, and such that the fluid is totally contained and made to reach rotor velocity, during which time the fluid, being contained has no velocity with respect to the rotor, but has acquired a high rotational momentum, and where upon the rotation of the enclosed fluid is displaced to a tangential discharge port , where the fluid is discharged by momentum, such that the fluid near the outer periphery of the rotor is allowed to be discharged at the axially outer vane tip velocity, and the pressurized, contained fluid changes pressure for velocity as the port opens.

4. A pump as in claim 3 in which the vane tips at the intake plenum are tangential and the fluid passages between the vanes are near to tangential but curve toward radial and are radial near to the periphery of the cylinder of rotation and the passage then turns away from the direction of rotation, and continues in a peripheral direction around a circular path to end by the vane extending axially outward to a close tolerance with the cylindrical wall of said housing chamber, such that the fluid passage on the axially inner zone is tangential, then turns to being radial, then back to being tangential such that on the axial outer portion of the passage surface, the passage becomes contained, but the portion of the outer contained chamber is the only part of the fluid passage which will be discharged by momentum as the peripheral portion of the chamber passes the tangential discharge port such that the kinetic pump becomes a positive displacement where the peripheral contained volumes correspond to displacement volumes and can be regulated in size in order both insure uniform high momentum but also to control capacity.

5. A pump as on claim 3 in which the fluid enters the pump axially, then changes direction to radial by encountering a conical rotor surface, and then due to the motion of the rotor and the rotation of vacuum zones caused by the fluid being ejected from the fluid passages, the fluid acquires rotation within the intake plenum such that the fluid leaves the plenum in a near to tangential manner as a tangential intake means.

6. A pump as in claim 3 in which the inlet duct has spiral guides to promote a rotating motion to the intake fluid, as another tangential means.

7. A pump as in claim 3 in which the rotor has a center cone, which moves the incoming fluid outward racially and the cone also has small radial attached vanes, which impart rotary motion to the inlet fluid within the intake plenum.

8. A pump as in claim 3 in which there are one or more intake ducts entering from the side and near to the axial center, and which have a partial volute as the fluid enters the intake plenum such that fluid entering the passages between vanes enters near to tangentially.

9. A pump as in claim 3, having one or more intake ducts which enter said intake plenum tangentially, and one or more discharge ducts, with said intake and discharge ducts aligned in a continuous and same direction, such that the fluid momentum provides thrust, such as may be used to propel a boat.

10 A pump as in claim 1 in which said housing cylindrical chamber cavity which has at least two discharge ports which are supplied with valves in order to open or close, each discharge being arcuate in shape and at located on a radius from the axis of rotation, each port being at a different radius from axial center and corresponding to a different pressure isobar such that the pressure output of the pump may be chosen by choosing the discharge port.

11. A pump as in claim 10 in which the shape of said chamber cavity is a conic frustum with the base being perpendicular to the axis of rotation, such that the axial width of the chamber decreases with increasing radius from the axis and the ports described in claim 10 are longer in sector opening at smaller axial

distance from the axis of rotation which allows greater flow rates at the longer port openings.

12. A pump as in claim 10 having multiple discharge ports located different axial distances from the axis of rotation, representing different isobar locations and having said housing chamber cavity being in the approximate shape of a conic frustum, and such that the conic angle, the axial location of said ports, and the sector length of said individual ports are chosen such as cause that the magnitude of pressure at said isobar times the flow through the port to be approximately equal in each port choice, such that the drive power is constant over a range of pressure and flow requirements.

13. A pump as in claim 1 in which said intake means is to allow slurries or sludge, or other semi-liquid fluids to enter said pump, and having additional intake ports with valves joining said slurry intake in said pump for water entry.

14. A fluid pump as in claim 1 in which the pump has dual functions: to provide a propulsion thrust capability, and to provide separation of density of particles entrained within the fluid, such that the pump has two discharge ports, with the port at a further axial distance from the axis of rotation having a bleed control valve and being used for particle separation, and the remaining port used for thrust momentum and to remove less dense entrained material, thereby.